

Name: _____ TP: _____

Assignment Summary:

Many scholars struggle in math because we want the quick answer. We do not want to have to read, write, or think in math class. The need for engineers, computer scientists, and mathematicians is at its highest as our world demands people who can innovate, and develop new technologies to keep up with the global economy. The goal of math is to improve our ability to come up with a plan of attack for complex problems that require an incredibly high level of thinking. The glory of math is that there is often more than one plan of attack that will lead us to the correct solution. Our attempt to push you to think at a high level is to develop you as patient "plan-of-attackers" via GRASP rather than impatient "quick answer-finders." This performance event will push you to critique some of your fellow 2016s GRASPing abilities in attempt to push the entire class of 2016 to become the next generation of engineers, computer scientists, and mathematicians.

Brainstorm your answers to the questions below on the "Brainstorm" page that follows so that you are ready to type!

Paragraph 1:

- Introduction – WHY are your Geometry teachers pushing you to GRASP? What is the purpose of GRASP? How has GRASP improved your ability to solve complex math problems?

Paragraph 2:

- Quiz 5 Grade Explanation – Using the language of the rubric, explain *specifically* why the 2016 scholar earned the grade that he/she did on EVERY rubric row. Use *specific* evidence from their GRASP assignment to back up your grade. Explain how he/she could have improved his/her grade.

Paragraph 3:

- HW 16 Grade Explanation – Using the language of the rubric, explain *specifically* why the 2016 scholar earned the grade that he/she did on EVERY rubric row. Use *specific* evidence from their GRASP assignment to back up your grade. Explain how he/she could have improved his/her grade.

Paragraph 4:

- Conclusion – How do your own GRASPing abilities compare to the GRASP assignments you just graded? Do you like GRASP? What do you need to do to step your GRASP game up? How can your Geometry teachers help you improve your GRASPing abilities?

Mission:

Your mission is two-fold:

- 1) Grade two of your peer's GRASP assignments using the GRASP rubric.
- 2) Write an explanation as to why you gave your peer the grade you did for each part of GRASP to ensure that the class of 2016 knows how to break down complex problems at a HIGH level of quality.

Audience:

A 2016 scholar (you can pick someone, make up a name, or use "2016 scholar").

Format:

- **Typed, 1-inch margins, double spaced**
- No excessive spacing of lines or margins
- MLA format heading
- Minimum length: 600 words (about 2 pages – inadequate length will result in a 1-letter-grade drop – **include word count**)
- Include your own creative title
- Staple in the following order: Assignment sheet, Quiz 5, Quiz 5 rubric, HW 16, HW 16 rubric, and final draft of paper.
- Indent the beginning of each paragraph
- **- 0.5 points for every error in this section**

Procedure:

1. Write paragraph 1 – your introduction (see assignment summary above for what to include)
2. Read GRASP rubric
3. Grade Quiz 5, circling where in the rubric the 2016 scholar has scored in each row
4. Write paragraph 2 (see assignment summary above for what to include)
5. Grade HW 16, circling where in the rubric the 2016 scholar has scored in each row
6. Write paragraph 3 (see assignment summary above for what to include)
7. Write paragraph 4 – your conclusion (see assignment summary above for what to include)
8. Self-edit
9. Make revisions based on editing
10. Proofread
11. Print final draft

Brainstorm your answers to the questions below so that you are ready to type!

Paragraph 1 is the **introduction**.

1) WHY are your Geometry teachers pushing you to GRASP?

2) What is the purpose of GRASP?

3) How has GRASP improved your ability to solve complex math problems?

Paragraph 2 is the **explanation of how you graded Quiz 5 on the GRASP rubric**.

Using the language of the rubric, explain why you selected the grades below. USE specific evidence from the scholar's GRASP assignment to prove why you gave the grade you did.

GOAL grade	Required grade
Analysis grade	Solve grade
Paraphrase grade	

Paragraph 3 is the explanation of how you graded HW 16 on the GRASP rubric.

Using the language of the rubric, explain why you selected the grades below. USE specific evidence from the scholar's GRASP assignment to prove why you gave the grade you did.

GOAL grade	Required grade
Analysis grade	Solve grade
Paraphrase grade	

Paragraph 4 is the conclusion.

1) How do your own GRASPing abilities compare to the GRASP assignments you just graded?

2) Do you like GRASP? Why or why not?

3) What do you need to do to step your GRASP game up?

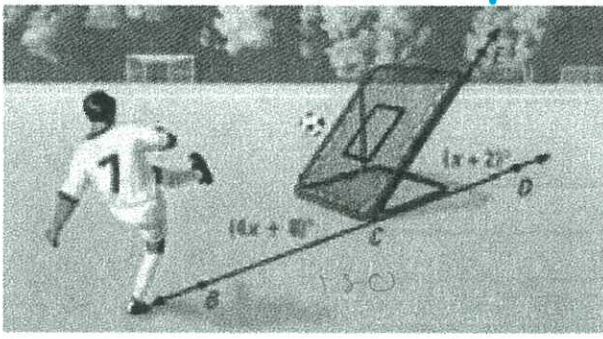
4) How can your Geometry teachers help you improve your GRASPing abilities?

Rubric

	Exceeding	Meeting	Approaching	Baseline	Unacceptable	Points
Accuracy of Quiz 5 Grade	Student accurately grades Quiz 5 per the GRASP rubric 10	Student is 1 point off of accurately grading Quiz 5 per the GRASP rubric 8	Student is 2 points off of accurately grading Quiz 5 per the GRASP rubric 6	Student is 3 points off of accurately grading Quiz 5 per the GRASP rubric 4	Student is more than 3 points off of accurately grading Quiz 5 per the GRASP rubric OR does not grade Quiz 5 0	___ / 20
Accuracy of HW 16 Grade	Student accurately grades HW 16 per the GRASP rubric 10	Student is 1 point off of accurately grading HW 16 per the GRASP rubric 8	Student is 2 points off of accurately grading HW 16 per the GRASP rubric 6	Student is 3 points off of accurately grading HW 16 per the GRASP rubric 4	Student is more than 3 points off of accurately grading HW 16 per the GRASP rubric OR does not grade HW 16 0	___ / 20
Introduction & Conclusion (para. 1 & 4)	Student clearly articulates responses to all introduction and conclusion prompts listed in the assignment summary 20	Student missing 1 response to the introduction and conclusion prompts listed in the assignment summary 16	Student missing 2 responses to the introduction and conclusion prompts listed in the assignment summary 14	Student missing 3 responses to the introduction and conclusion prompts listed in the assignment summary OR fails to include either the introduction or conclusion 12	Student missing more than 3 responses to the introduction and conclusion prompts listed in the assignment summary OR fails to include introduction and conclusion 0	___ / 20
Quiz 5 Explanation (paragraph 2)	Student clearly articulates rationale for why grade was assigned on EVERY GRASP rubric row AND uses specific evidence from the scholar's GRASP assignment to justify EVERY rubric row grade 20	Student missing rationale (or rationale incorrect) for 1 rubric row OR missing specific evidence from the scholar's GRASP assignment to justify 1 rubric row grade 16	Student missing rationale (or rationale incorrect) for 2 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify 2 rubric row grades 14	Student missing rationale (or rationale incorrect) for 3 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify 3 rubric row grades 12	Student missing rationale (or rationale incorrect) for more than 3 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify more than 3 rubric row grades 0	___ / 20
HW 16 Explanation (paragraph 3)	Student clearly articulates rationale for why grade was assigned on each GRASP rubric row AND uses specific evidence from the scholar's GRASP assignment to back up why the grade was assigned. 20	Student missing rationale (or rationale incorrect) for 1 rubric row OR missing specific evidence from the scholar's GRASP assignment to justify 1 rubric row grade 16	Student missing rationale (or rationale incorrect) for 2 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify 2 rubric row grades 14	Student missing rationale (or rationale incorrect) for 3 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify 3 rubric row grades 12	Student missing rationale (or rationale incorrect) for more than 3 rubric rows OR missing specific evidence from the scholar's GRASP assignment to justify more than 3 rubric row grades 0	___ / 20
Writing Expectations	No spelling errors and no capitalization errors 20	1 - 2 spelling errors and/or 1 - 2 capitalization errors 16	3 - 4 spelling errors and/or 3 - 4 capitalization errors 14	5 - 6 spelling errors and/or 5 - 6 capitalization errors. 12	More than 6 spelling errors and/or more than 6 capitalization errors. 0	___ / 20
Total: _____ / 100						

Homework 16

SPORTS When viewed from the side, the frame of a ball-return net forms a pair of supplementary angles with the ground. Find $m\angle BCE$ and $m\angle ECD$.



Solution

The angle to the left says $(4x + 8)$ degrees. The angle to the right says $(x + 2)$ degrees.

G
the goal
in this
question
is to
find x

R
The two
angles
and
that
 B, C, D equals
180

A
First
add
like
terms
= it
180
then
divide
to isolate
 x .

S

$$4x + 8 + x + 2 = 180$$

$$5x + 10 = 180$$

$$\begin{array}{r} 5x + 10 = 180 \\ -10 \quad -10 \\ \hline 5x = 170 \\ \hline x = 34 \end{array}$$

P
First
I put
 $4x + 8 + x + 2$
and equal
it to
180
and
then
find
 x and
plug it in

Two angles form a linear pair. The measure of one angle is six more than twice the measure of the other angle. Find the measure of each angle.

G
Is
to find
out what
the angle
is

R
 $6 + 2x = 180$
and then
subtract
to get
the angle
and know
the angle
adds
up to
180

A
First
I will
get $6 + 2x =$
then
subtract
and to
get the
other angle

S

$$6 + 2x = 180$$

$$\begin{array}{r} 6 + 2x = 180 \\ -6 \quad -6 \\ \hline 2x = 174 \\ \hline x = 87 \end{array}$$

$$180 - 87 = 93$$

$x = 93$

P
I know
this
is
right
b/c
my
answers
add
up to
180

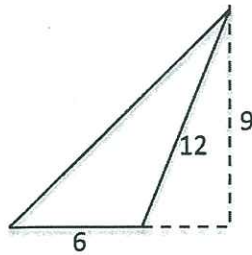
STAY READY...

6. Use the problem below to answer questions a - b.

$$\text{Area} = \frac{1}{2} \cdot b \cdot h$$

$$\text{Area} = \frac{1}{2} \cdot 6 \cdot 12$$

$$\text{Area} = 36$$



a) Explain the mistake made in solving for the area of the triangle. Be specific (vocabulary can earn bonus pts!).

The mistake was that the student confused the height of the triangle with the measurement of the side of the triangle that is not needed to find the area.

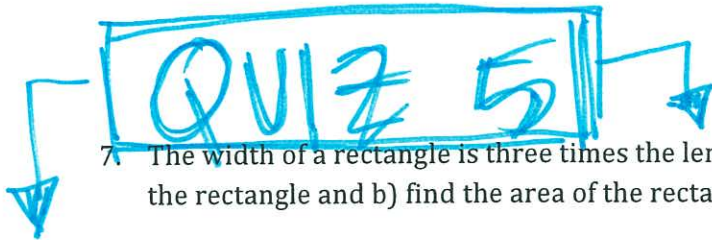
b) Correct the mistake and box the correct area.

$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(6)(9)$$

$$A = 27_{\text{units}}$$

1.5/2



7. The width of a rectangle is three times the length. If the perimeter is 108, a) find the length and the width of the rectangle and b) find the area of the rectangle.

G Our goal is to find the length and the width of the rectangle. our goal is to also find the area of the rectangle. (+)

R we are given: $a = \frac{1}{2}LW$
 $W = 3L$
 $P = 108$

A ① First, I need to draw a picture which will give me a visual on the measurements of each side. ② Next, I will need to make an expression adding each side together to equal 108. ③ Then, I will need to solve for L. Then, I will substitute for L to find the width. The multiply length & width to find area.

S ① ② $3L + 3L + L + L = 108$
 $6L + 2L = 108$
 $8L = 108$
 $L = 13.5$

$$L = 13.5 \quad (+)$$

$$W = 40.5 \quad (+)$$

$$13.5(40.5) = 546.75 \quad (+)$$

$$A = 546.75 \quad (+)$$

P The width of the rectangle is 40.5. The length of the rectangle is 13.5. The area of the rectangle is 546.75. I know this b/c if I add up $13.5 + 13.5 + 40.5 + 40.5$, it will give me a sum of 108 which was the perimeter that was given to me. If I multiply, $13.5(40.5)$, I will get 54.75 which is the area.